

Chapter 5 Technology Integration Lesson Planning



John Magee
Andrew Colpitts

1. Choose two lesson ideas from the list on My Education Lab.
2. Evaluate the lesson -- Use the Evaluation Checklist for a Technology-Integrated Lesson to evaluate each of your lessons.
3. Modify a lesson -- Select one of the lesson ideas and adapt its strategies to meet a need in your own content area. You may choose to use the same software as in the original or to use a different software package.
4. Add descriptors -- Create descriptors for your new lesson similar to those found within the sample lessons (e.g., grade level, content and topic areas, technologies used, relative advantage, objectives, NETS standards).

Lesson Plan #1:

Holocaust Video Histories

Objectives:

- Create a video interview of a Holocaust survivor.
- Students identify people to interview
- Create questions to ask
- Have other students take video of the interview.
- Laptops are helpful for pre- and post-production as they are portable



Production steps include the following:

1. Video team divides up the interview into equal portions and transcribes it using Listen and Type (free audio transcription software), and uses Apple QuickTime or another video editing software to divide the video up into segments.
2. They paste their transcribed text into blank web page files (e.g., with Dreamweaver), and hyperlink each text segment to its corresponding video segments.
3. They proofread the web pages and upload them to a school site.

Lesson Plan #2:

Activities for Gifted Students: Grades 4-5

Objectives:

- Research and report on the history of the Olympics.
- Develop a database of information on Olympic contenders.
- Use a database of information on past performance of Olympic contenders to make
- Predictions on their future performance.



Description

1. Olympics research - Ask students to gather information about the Olympics several sources. Focus on only two events, such as swimming and gymnastics. The groups develop and make reports on these activities and the performers in them.
2. Data analysis - from the members of the national teams. It quickly becomes evident that there is too much information to analyze easily without some organization. Introduce databases as a way to help deal with the data. Show the students how to create a database and have them brainstorm the most important fields to include.

Different types of data to enter into database

- First name and last name
- Gender
- Age
- Favorite event
- Began sport
- Coach
- Height
- Weight
- Birthplace
- Residence
- Sport
- National standings
- World standings

Using the database

- Students enter the required information for the athletes
- Arrange the files alphabetically and numerically
- Deductions about the performers. (For example, the female gymnasts are usually all teenagers, while the males are in their twenties)
- Use the data to predict who will compete in the Olympics
- Review their predictions after Olympics and compare results

Required resources: Database software; reference resources on the chosen sport, gymnastics in this example.

2 - Rubric “Evaluation Checklist for a Technology-Integrated Lessons”

Assessment of Lessons and Courses

Phase 1: Rationale for Using Technology	Yes	No	U
Lesson plan	#1	#2	
1. The lesson topic or skill area is one that teachers often report difficulties teaching.	N		Y
2. The technology-based lesson offers clear relative advantage over other ways of teaching the topic or skill. The relative advantage is:	Y		Y
3. The relative advantage seems sufficient to justify the extra expense and effort required to use the technology.	Y		Y

Phase 2: Lesson Objectives and Assessments

	Yes No U		
	Lesson plan	#1	#2
4. Objectives are clear statements of products and/or performances that students are required to do to demonstrate learning.		Y	Y
5. Student objectives reflect measures that are usually required for the topic/area or that makes sense as alternatives to those usually required.		Y	Y
6. An assessment plan and instruments are given; assessment instruments are well designed.		N	N
7. There is a clear match between student objectives and assessments.		N	N

Phase 3: Technology Integration Strategies

	Yes No U	
Lesson plan	#1	#2
8. An individual approach or a grouping strategy for using the technology resources is specified and described.	Y	Y
9. The technology-based activities are essential to helping students accomplish the lesson objectives.	Y	Y
10. The lesson describes how teachers should prepare students to use technology resources before their work is graded.	Y	Y
11. The lesson timeframe seems logical to accomplish all the specified activities.	U	U
12. Strategies are described for making sure all students (e.g., disabled, females, minorities) are included in learning activities.	N	N

Phase 4: Preparation Logistics

	Yes No U	
	Lesson plan	
	#1	#2
13. Required numbers and types of equipment and software/media copies are described.	Y	Y
14. The lesson makes it clear how long teachers and students will need access to technology resources.	N	N
15. Technology resources required to do the lesson are commonly available and not expensive.	N	N
16. The lesson makes it clear how to protect students' privacy and safety while using technologies.	N	N
17. Teachers are likely to have skills required to implement the lesson.	N	Y
18. The lesson describes a backup plan if technology resources are not available as planned.	N	N

Phase 5: Evaluation and Revision

	Yes No U		
	Lesson plan	#1	#2
19. There is evidence that the lesson has been field-tested and revised based on field test results.		Y	Y
20. There is evidence that the lesson has been used successfully in a classroom.		Y	Y

3. Modify a lesson and 4. Add descriptors

Title: Interview With an Author

Topic: Oral Interview

Content Areas:

Technology

Language Arts

Technologies Used:

Video Camera

Internet

Video development

HTML (web page) Editor



Grade Levels: High School

Relative Advantages:

Makes unfamiliar topics more visual, understandable.

Professional, polished looking products motivate students.

Format aids collaborative, cooperative group work.

Easier, faster access to information sources.

Objectives:

Create a video interview of Author/ student replacement for an author.

Standards:

NB Language Arts Curriculum 9-12

ISTE Standards – NETS-S

1a – Creativity and Innovation Students apply existing knowledge to generate new ideas, products, or processes.

1b - Creativity and Innovation Students create original works as a means of personal or group expression.

Standards Continued:

2a - Communication and Collaboration Students interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

2b – Communication and Collaboration Students communicate information and ideas effectively to multiple audiences using a variety of media and formats.

2c – Communication and Collaboration Students develop cultural understanding and global awareness by engaging with learners of other cultures.

2d - Communication and Collaboration Students contribute to project teams to produce original works or solve problems.

Standards Continued:

3a – Research and Information Fluency Students plan strategies to guide inquiry.

4a – Critical Thinking, Problem Solving, and Decision Making

5a - Digital Citizenship Students advocate and practice safe, legal, and responsible use of information and technology.

5b – Digital Citizenship Students exhibit a positive attitude toward using technology

5c - Digital Citizenship Students demonstrate personal responsibility for lifelong learning.

6a – Technology Operations and Concepts Students understand and use technology systems.

6b - Technology Operations and Concepts Students select and use applications effectively and productively.

6d - Technology Operations and Concepts Students transfer current knowledge to learning of new technologies.

Description

This project focuses on an author or student replacement, but similar activities can be done to document other disciplines. Students identify people to interview, create questions to ask, and have other students take video of the interview. Laptops are helpful for pre- and post-production tasks because they are portable.

Production steps include the following:

1. After an interview is complete, each video team divides up the interview into equal portions, transcribes it using Listen and Type and uses Apple QuickTime.
2. They paste their transcribed text into blank web page files (e.g., with Dreamweaver), and hyperlink each text segment to its corresponding video segments.
3. They proofread the web pages and upload them to a school site.

Assessment: Rubric to assess video products